

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2016 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

<b>RD0787</b>	Overall LMA Rating	Total LMA Miles						
<b>Reclamation District No. 0787 Fair</b>	<b>A</b>	<b>4.45</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01		0.01	0.23%				
Encroachments	0.01		0.01	0.23%	2.42			
Flood Preparedness & Training	0.04		0.04	0.90%				
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.29		0.29	6.52%				
DWR UCIP Field Study					0.01			
<i>LMA Totals:</i>	0.35	0.00	0.35	7.87%	2.43	0.00	0.00	0.00
<b>Unit No. 01 Colusa Basin Drain LB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD0787</b>	<b>A</b>	<b>4.45</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01		0.01	0.23%				
Encroachments	0.01		0.01	0.23%	2.42			
<i>Supplemental</i>								
2015 USACE Erosion Survey, DRAFT	0.29		0.29	6.52%				
DWR UCIP Field Study					0.01			
<i>Unit Totals:</i>	0.31	0.00	0.31	6.97%	2.43	0.00	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2016 Levee Inspection Results**

**Reclamation District No. 0787 Fair**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			A	

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2016 Levee Inspection Results**

**Reclamation District No. 0787 Fair**

Waterway			Bank	Unit Miles
Unit No. 01 Colusa Basin Drain			Left	4.45
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>A</b>	
Date of Inspection	3/22/2016 - 3/22/2016		9/26/2016 - 9/26/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By	Roger Cornwell Rivergarden Farms RD 787		Roger Cornwell Rivergarden Farms RD 787	

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD0787_01_s_2013_7				
Comment Code					
Inspector Comment					
RD 787 shares flood resources with RD 108 with a stockpile of flood response materials.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD0787_01_s_2013_8				
Comment Code					
Inspector Comment					
RD 787 is current with O&M manuals.					

No Photos

LM Start		Rating **	M	Issue No.	10
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD0787_01_s_2012_10				
Comment Code					
Inspector Comment					
RD 787 works jointly with RD 108 on training and flood response.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start	0.01	Rating **	M	Issue No.	4
LM End	0.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.799508 °	38.799464 °
				-121.725522 °	-121.725564 °
DWR ID	DWR_RD0787_01_f_2016_4				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0787\_212\_4\_20160926\_00013.jpg



Vegetation on waterward slope. Fall 2016.

LM Start	0.04	Rating **	M	Issue No.	15
LM End	0.04	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.799159 °	38.799159 °
				-121.725874 °	-121.725874 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:37585					
DS_ID:22892					
EP_NO: 9392					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure.					
FIELD_STRUCT_DESC: 36-inch concrete pipe through the levee 17.0 feet below the crown. Slide gate in 36-inch standpipe on the waterward side (App. 9392 - River Garden Farms). 24-inch pipe from standpipe to pump house mounted on steel structure in channel. Pump and 24-inch steel pipe installed on the waterward side, 1962 (App. 3878 - river Garden Farms).					
FS Date: 6/10/2014					

Photo 1 of 2 : UCIP\_FA\_2016\_37585\_68154.jpg



View of landward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start	0.04	Rating **	M	Issue No.	15 (cont)	
LM End	0.04	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.799159 °	38.799159 °	
				-121.725874 °	-121.725874 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:37585						
DS_ID:22892						
EP_NO: 9392						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure.						
FIELD_STRUCT_DESC: 36-inch concrete pipe through the levee 17.0 feet below the crown. Slide gate in 36-inch standpipe on the waterward side (App. 9392 - River Garden Farms). 24-inch pipe from standpipe to pump house mounted on steel structure in channel. Pump and 24-inch steel pipe installed on the waterward side, 1962 (App. 3878 - river Garden Farms).						
FS Date: 6/10/2014						

Photo 2 of 2 : UCIP\_FA\_2016\_37585\_68153.jpg



View of landward side.

LM Start	0.32	Rating **	C	Issue No.	6
LM End	0.32	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.796455 °	38.796455 °
				-121.729468 °	-121.729468 °
DWR ID	DWR_RD0787_01_s_2016_6				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start	0.39	Rating **	M	Issue No.	1
LM End	0.50	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.795931 °	38.795268 °
				-121.730627 °	-121.732566 °
DWR ID	DWR_RD0787_01_s_2016_1				
Comment Code					
Inspector Comment					
2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading. Additional erosion due to human use. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CBD_0-5_L]					

No Photos

LM Start	0.67	Rating **	M	Issue No.	2
LM End	0.85	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.795486 °	38.796225 °
				-121.735647 °	-121.738902 °
DWR ID	DWR_RD0787_01_s_2016_2				
Comment Code					
Inspector Comment					
2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CBD_0-9_L]					

No Photos

LM Start	1.58	Rating **	M	Issue No.	13
LM End	2.73	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.801794 °	38.809506 °
				-121.750204 °	-121.768979 °
DWR ID	DWR_RD0787_01_s_2012_13				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 3 : FA\_2016\_RD0787\_212\_13\_20160913\_00003.jpg



Agricultural ditch runs along landside the distance of the district.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



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**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start	1.58	Rating **	M	Issue No.	13 (cont)	
LM End	2.73	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.801794 °		38.809506 °
				-121.750204 °		-121.768979 °
DWR ID	DWR_RD0787_01_s_2012_13					
Comment Code						
DT : Ditch						
Inspector Comment						

Photo 2 of 3 : FA\_2016\_RD0787\_212\_13\_20160913\_00004.jpg



A view of the agricultural ditch in the fall of 2011.

LM Start	<b>1.58</b>	Rating **	M	Issue No.	<b>13 (cont)</b>
LM End	<b>2.73</b>	Issue Type +	En	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0787\_212\_13\_20160913\_00005.jpg



The agricultural ditch runs along the toe of the levee. Spring 2014

LM Start	1.73	Rating **	M	Issue No.	11
LM End	1.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.802693 °	38.802693 °
				-121.752672 °	-121.752672 °
DWR ID	DWR_RD0787_01_f_2016_11				
Comment Code					
GA : Garbage					
Inspector Comment					

Photo 1 of 1 : FA\_2016\_RD0787\_212\_11\_20160926\_00012.jpg



Burnt loudspeaker near levee crown on waterward side. Fall 2016.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2016**

**Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	09/26/2016 09/26/2016	Oleg Yakimov

LM Start	3.13	Rating **	M	Issue No.	14
LM End	4.40	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.812963 °	38.822302 °
				-121.774880 °	-121.795295 °
DWR ID	DWR_RD0787_01_s_2012_14				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 3 : FA\_2016\_RD0787\_212\_14\_20160913\_00006.jpg



Ditch along landside toe.

LM Start	<b>3.13</b>	Rating **	M	Issue No.	<b>14 (cont)</b>
LM End	<b>4.40</b>	Issue Type +	En	Location *	LS

Photo 2 of 3 : FA\_2016\_RD0787\_212\_14\_20160913\_00007.jpg



A current view of the agricultural ditch photo taken in fall of 2011.

LM Start	<b>3.13</b>	Rating **	M	Issue No.	<b>14 (cont)</b>
LM End	<b>4.40</b>	Issue Type +	En	Location *	LS

Photo 3 of 3 : FA\_2016\_RD0787\_212\_14\_20160913\_00008.jpg



The agricultural ditch runs along the toe of the levee slope. Spring 2014

**\* Location**  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement